

REMARKS

The present response is intended to be fully responsive to the rejection raised in the Office action, and is believed to place the application in condition for allowance. Further, the Applicants do not acquiesce to any portion of the Office Action not particularly addressed. Favorable reconsideration and allowance of the application is respectfully requested.

In the Office action, the Office noted that claims 1 and 2 are pending and rejected. Applicants amend claim 1. Applicants have not introduced any new matter by way of the foregoing amendments.

In view of the above amendments and the following discussion, the Applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. § 103. Thus, Applicants believe that all of these claims are now in condition for allowance.

REJECTION

The Office rejected claims 1 and 2 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,233,50 issued to Gersho et al. (hereon after "Gersho") in view of U.S. Patent No. 5,495,556 issued to Masaaki Honda (hereon after "Honda"). The Applicants respectfully traverse the rejections.

As the Examiner is aware, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claimed limitations. The teaching or suggestions to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F. 2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Furthermore, as the Office is also aware, the courts have repeatedly stated that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. V. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983).

The Applicants agree with Office that *Gersho* does not “disclose determining a zero-phase equalization filter for said frame; and that harmonic which fall into a band that was determined to have a voicing level below a threshold are replaced for said zero-phase equalization filter.” *Office Action*, at page 3. In support of a contention that *Honda* discloses such an element, the Office cites *Honda* at col. 4, lines 5-9. The Applicants respectfully disagree.

Amended claim 1 recites a combination of elements directed to a method of speech encoding. The combination of elements includes “determining bandpass voicing levels for a frame of speech; and determining a zero-phase equalization filter for said frame wherein harmonics which fall into a band that was determined to have a voicing level below a threshold in step (a) are replaced for said zero-phase equalization filter, wherein the equalization filter is only applied to the harmonics recognized as voice.”

Gersho recites a “method and apparatus for encoding speech communication to a decoder for reproduction of the speech where the speech signal is classified into steady state voiced (harmonic), stationary unvoiced, and ‘transitory’ or ‘transition’ speech, and a particular type of coding scheme is used for each class. *Gersho*, at Abstract.

Honda, on the other hand, discloses a “speech synthesizing apparatus for receiving parameters representing speech waveform”, wherein “parameters are received that include prediction coefficients representing a speech spectral envelope characteristics... and zero filter coefficients which provide a sequence of impulses with a shape resembling a phase-equalized residual of a speech.” *Honda*, at Abstract. Furthermore, *Honda* discloses a “phase equalization-analyzing part 4 coefficient of a phase equalizing filter for rendering the phase characteristic of the speech into a zero phase and reference time points of phase equalization are computer.” *Honda*, at col. 4 lines 5-9.

Therefore, *Honda*, unlike amended claim 1, discloses an “apparatus for receiving parameters,” the apparatus includes a phase equalization-analyzing part “for rendering the phase characteristics of the speech into a zero phase” and for computing the referencing time points of phase equalization.” Amended claim 1 specifically recites a method for speech encoding that includes the step of “the equalization filter is only applied to the harmonics recognized as voice.”

Accordingly, it is Applicants' opinion that neither *Gersho* nor *Honda* teach or suggest "determining a zero-phase equalization filter for said frame wherein harmonics which fall into a band that was determined to have a voicing level below a threshold in step (a) are replaced for said zero-phase equalization filter, wherein the equalization filter is only applied to the harmonics recognized as voice."

Furthermore, it is Applicants' opinion that neither *Gersho* nor *Honda* suggest or show a motivation for modifying the reference or to combine the reference teachings. In addition, it is Applicants' opinion that there is no evidence in either prior art that shows a "reasonable expectation of success" in combining the references.

Thus, it is Applicant's belief that a prima facie case of obviousness has not been provided. Therefore, the Applicants submit that *Gersho* and *Honda*, alone and in combination, do not teach all the elements of the amended claim 1 or render claim 1 obvious.

Given that dependent claim 2 depends directly from claim 1, claim 2 necessarily includes all the elements of amended, independent claim 1. Since *Gersho* and *Honda*, alone and in combination, do not teach all the elements of amended independent claim 1, the Applicants submit that *Gersho* and *Honda*, alone and in combination, also do not teach all the elements or render claim 2 obvious.

The Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1 and 2.

CONCLUSION

In view of the foregoing, the Applicants submit that none of the claims presently in the application are obvious under the provisions of 35 U.S.C. §103. Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Office believes that any unresolved issues still exist or if, in the opinion of the Office, a telephone conference would expedite passing the present application to issue, the Office is invited to call the undersigned attorney directly at 972-917-4365 or the office of the undersigned attorney at 972-917-4363 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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